

## REMARKS

### Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-9 under 35 U.S.C. § 103 as being unpatentable over United States Patent No. 5,480,196 to Adams, Jr. (the “Adams reference”) in view of United States Patent No. 4,752,208 to Iwata et. al (the “Iwata reference”), and further in view of United States Patent No. 5,842,727 to Shade (the “Shade reference”). The Assignee respectfully traverses the rejection for at least the following reasons.

#### *1. Claim 1*

In his rejection, the Examiner stated the Shade reference “teaches at least first and second sections defined by a sloped transition (34) from the first inner diameter to a second inner diameter (32).” The purpose of this transition, as cited by the Examiner and stated in the Shade reference, is “to slidably receive spiral corrugated pipe” (see col. 3, lines 56-57 of the Shade reference).

The Applicants note that the tapered transition of the Shade reference occurs *in the coupling*, rather than in the corrugated pipe itself. That is, transition 34 defines a change between an first inner diameter of the coupling and a second inner diameter of the coupling (Fig. 1; col. 3, lines 16-57). This transition means “tubular end 16 [of the coupling] is adapted to slidably receive spiral corrugated pipe end 28b within sleeve 14 [of the coupling]” (col. 3, lines 56-57). Accordingly, the purpose of the Shade reference’s transition is to permit corrugated pipe to be received within the coupling.

By contrast, independent claim 1 requires the bell ends of the first and second pipe sections be defined by a “sloped transition” from a first inner diameter to a second inner diameter. This sloped transition is not a part of the connector insert of claim 1. Further, the bell end of either corrugated pipe section does not receive any corrugated pipe.

Accordingly, the Assignee respectfully submits that one of ordinary skill in the art would not read the Shade reference to teach or suggest claim 1’s sloped transition defining the corrugated pipe’s bell ends. The Shade reference’s tapered transition 34 is designed to “slidably receive spiral corrugated pipe” *within the coupling*. By contrast, the sloped transition of claim

1's bell-ended pipe sections has no such purpose, insofar as the bell-ended pipe sections do not receive corrugated pipe. The motivation (as cited by the Examiner and set forth in Shade) is inapplicable to the sloped transition of claim 1.

Further, the Assignee respectfully submits that the Shade reference's tapered transition, even if used properly with the other cited references, would not render obvious or anticipate the invention of independent claim 1. Placing a tapered transition inside Adams reference's connector (the closest analogous structure to Shade's coupling) would not yield the invention of claim 1. Instead, the connector of the Adams reference (shown, for example, in Fig. 4) would simply include a sloped portion along its interior. This does not correspond to the sloped transition of claim 1, which is located in each of the pipe sections rather than in the connector insert.

Finally, the Assignee respectfully submits the Shade reference teaches away from the invention of claim 1. The Shade reference discloses a coupling designed to fit *over* a corrugated pipe; the tapered transition facilitates this. By contrast, the invention of claim 1 includes a "connector *insert*" (emphasis added) that fits *inside* the bell-formed ends. In other words, the Shade reference suggests using an exterior connector, while claim 1 requires an interior connector. The purpose of the Shade reference's tapered section 34 clearly teaches that pipe is received by the connector. Such a teaching is directly opposite the invention of claim 1, which requires a "connector insert... positioned in... [the corrugated pipes'] bell-formed ends."

For all the foregoing reasons, the Assignee respectfully submits that claim 1, as it stands, is patentable over the cited references, either individually or in combination. Accordingly, the Assignee respectfully requests the Examiner withdraw his rejection and allow claim 1 as soon as practicable.

## 2. *Claims 2-9*

The Assignee respectfully submits claims 2-9 depend from a patentably distinct independent claim, namely claim 1. Thus, these claims are themselves patentable. The Assignee makes this statement without reference to or disclaiming the additional bases of patentability within each dependent claim. Accordingly, insofar as claims 2-9 depend from an independent claim shown to be patentable, the Assignee respectfully requests these claims be allowed as well.

Allowable Subject Matter

The Assignee notes with appreciation the Examiner's allowance of claims 17-19.

Closing Remarks

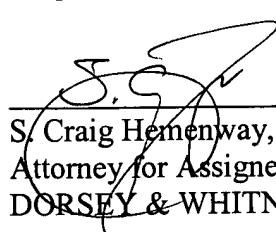
Although specific reference has been made above to certain patentable elements of independent claim 1, it should be understood that these are by no means the only patentable elements contained within this claim. Similarly, while the Assignee asserts that the dependent claims are patentable as depending from a patentably distinct independent claim, the Assignee makes this statement without reference to the additional bases of patentability contained within each of the dependent claims.

This Response is filed without any petitions or fees. The Applicants believe none are required. However, should any petitions or fees associated with this amendment be necessary, please consider this a request therefor and charge Deposit Account No. 04-1415 as necessary.

The Applicants thank the Examiner for his review of the claims in this application. Further, the Applicants submit that the application is now in condition for allowance, and respectfully request that the application be passed to allowance. Please charge the fees for a three-month extension of time to Deposit Account No. 04-1415, as well as any additional fees which may be required. In the event the Examiner has questions or comments and a telephone conversation would expedite a resolution, the Applicants invite the Examiner to contact the undersigned attorney at (303) 352-1124.

Signed at Denver, Colorado, this 4<sup>th</sup> day of August, 2003.

Respectfully submitted,

  
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